Paper No. 27

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN V. JOSEPH,
MARK B. SHADOWENS, CRAIG W. THOMPSON
and JOHN CHUNG-LIN CHEN

Appeal No. 95-1599
Application 08/062,492[1]

ON BRIEF

Before HAIRSTON, BARRETT, and CARMICHAEL, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 8 through 13 and 19 through 32.

[1] Application for patent filed May 14, 1993. According to appellants, this application is a continuation of Application 07/526,215, filed May 21, 1990. (Abandoned).

The disclosed invention relates to a change management system for specifying and managing changes to an object in response to received calls from an application that is independent of the change management system.

Claim 26 is the only independent claim on appeal, and it reads as follows:

26. A change management system for in response to received calls from an application independent of said changed management system specifying and managing changes to an object and a plurality of groupings of a plurality of said object comprising, in combination:

a version abstract machine including a first instruction set, said version abstract machine responsive to said received calls from said application to said first instruction set for specifying and managing evolution of said object as a version graph having a version graph name;

a configuration abstract machine including a second instruction set, said configuration abstract machine responsive to said received calls from said application to said second instruction set for specifying and managing composition of each of said plurality of groupings of said plurality of said object as a configuration graph having a configuration graph name; and

a processor machine, said processor machine responsive to said version abstract machine and said configuration abstract machine for executing said first instruction set and said second instruction set.

The reference relied on by the examiner is:

Leblang et al. (Leblang)	4,809,170	Feb. 28, 1989

Claims 8 through 13 and 19 through 32 stand rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention.

Claims 8 through 13 and 19 through 32 stand rejected under the first paragraph of 35 U.S.C. § 112 as being based upon a non-enabling disclosure.

Claims 8 through 13 and 19 through 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over Leblang.

Reference is made to the briefs and the answer for the respective positions of the appellants and the examiner.

OPINION

Upon careful review of the disclosed and claimed invention, we find that claims 8 through 13 and 19 through 32 are definite, are based upon an enabling disclosure, and are patentable over the applied prior art. Accordingly, all of the rejections are reversed.

Turning first to the indefiniteness rejection of claims 8 through 13 and 19 through 32, the examiner finds (Answer, page 3) problems with respect to precisely what functions are being performed by the version abstract means and the configuration

abstract means of claim 26. According to the examiner (Answer, page 3), "the functions being performed by the version abstract machine and configuration abstract machine are not significantly further described in detail in the specification, with the result that the full scope and complexity of the claimed functions being performed by the two abstract machines are not presented." The examiner's contentions to the contrary notwithstanding, appellants' disclosure (specification, pages 3 through 8) explains in great detail the functions performed by both the version abstract machine and the configuration abstract machine." The data structure of the version abstract machine (Figure 4) clearly shows how the "evolution" of object 72 is specified and managed via the use of a "version graph" 70. The other versions of object 72 are located at nodes 74, 76, 78, 82, 84, 92 and 94 (specification, page 11). The data structure of the configuration abstract machine (Figure 5) clearly shows how the nodes 320, 340, 360 and 380 are connected to form configuration graph 300. Each node models the object (specification, page 13). The version abstract machine and the configuration abstract machine "manage name spaces to map machine states 28 and 27 respectively [Figure 1] into character string names" (specification, page 11) (emphasis added). With respect to the examiner's concerns

(Answer, pages 3 and 4) about the relationship of the "processor machine" and the two abstract machines, appellants explain throughout the disclosure that the two abstract machines are part of a change management virtual machine (CMVM) 20 (Figure 1), and that the CMVM 20 is a "processor machine" that executes "said first instruction set and said second instruction set." In claim 8, the version abstract machine is the "structure" for performing the claimed "functions" (Answer, page 4). In claims 19 and 20, the "plurality of said object" (Answer, pages 4 and 5) refers to the objects at each of the nodes (Figure 4). In claims 24 and 25, the "structure" (Answer, page 5) for performing the claimed functions is the "version abstract machine" and the "configuration abstract machine," respectively. The "pointer" (Answer, page 5) in claims 29 and 31 is illustrated in Figure 7 wherein the truck engine configuration node 540 points to version graph 600 for specific versions of the truck engine. In claim 32, the "collection of functions" (Answer, pages 5 and 6) is performed by the version abstract machine, the configuration abstract machine and the processor machine. Thus, the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the application

disclosure. See In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). The rejection of claims 8 through 13 and 19 through 32 under the second paragraph of 35 U.S.C. § 112 is reversed.

Turning next to the lack of enablement rejection, we agree with the examiner that the change management system is a "complex system" implemented with "abstract machines" (Answer, page 6). We do not, however, agree with the examiner's statement that "the instant disclosure has no description of . . . programs or software modules" (Answer, page 6). Appellants disclose (specification, page 7) that the change management system is implemented in Common Lisp and in C++. In view of the disclosure of the programming languages, and the detailed instruction sets (specification, pages 19 through 22) for the version abstract machine and the configuration abstract machine, we are of the opinion that a skilled data structures programmer[2] could arrive at the "programs or software modules" (Answer, page 6) for the disclosed and claimed invention without undue experimentation. As indicated in Genentech Inc. v. Novo Nordisk A/S, 108 F.3d 1361, 1365, 42 USPQ 1001, 1004 (Fed. Cir.), cert. denied, 118

[2] A data structures programming course teaches graphing a tree with nodes.

S.Ct. 397 (1997), appellants' disclosure is only required to teach those skilled in the art how to make and use the claimed invention without undue experimentation, and the scope of the claims must bear a reasonable correlation to the scope of enablement provided by the specification to persons of ordinary skill in the art. Since appellants' claimed invention is enabled by the disclosure, the rejection of claims 8 through 13 and 19 through 32 under the first paragraph of 35 U.S.C. § 112 is reversed.

Turning to the prior art rejection, Leblang discloses the use of configuration management in a support system for Computer-Aided Software Engineering (CASE) applications. A feature of the support system is transparent retrieval of named versions of program sequences/modules on a line-by-line basis. A modification record is maintained for all changes to the modules in the system build library by version numbers. An advantage of the support system is that different programmers can simultaneously use different versions of program modules for multiple concurrent system work on the different versions (Figure 4, and column 8, lines 50 through 53). Inasmuch as a line between two points can be a graph, we agree with the examiner (Answer, page 8) that "[t]he claim language 'graph' is so broad that it reads on the

linear line of ascent and independent line of descent of Leblang et al." The examiner's conclusion (Answer, page 8) that Leblang "provides configuration and version management which meets the very broadly claimed functions being performed by the version and config-uration abstract machines" is correct insofar as it relates to the broadness of the claims on appeal and the disclosure of version management in Leblang. The configuration management system disclosed by Leblang is only concerned with versions of software modules, and not with configurations of software modules. In short, the Leblang system discloses a "version abstract machine," but not a "configuration abstract machine." The claimed "received calls from said application" "independent of said change management system," and the claimed "first instruction set and said second instruction set" have not been addressed by the examiner. The 35 U.S.C. § 103 rejection of claims 8 through 13 and 19 through 32 is reversed.

DECISION

The rejections of claims 8 through 13 and 19 through 32 under the first and second paragraphs of 35 U.S.C. § 112, and 35 U.S.C. § 103 are reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)
LEE E. BARRETT Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
JAMES T. CARMICHAEL Administrative Patent Judge	)

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